

## Comprehensive Clinical Review of Neck Pain: NURS 6512 Week #9 Case Study of a 30-Year-Old Woman



### i-Human Case Week #9

30 y/o  
5' 5" (165 cm)  
120.0 lb (54.5 kg)

**Reason for encounter**  
Neck pain

## Case Instructions

### H&P+Dx CASE PLAY SETUP AND INSTRUCTIONS

#### MODE:

This assignment is in [Learning Mode](#). Feedback appears after submitting each section, and a final performance overview generated after completing the case.

*Case authored by: i-Human Patients Acad*

## **Comprehensive Clinical Review of Neck Pain: NURS 6512 Week #9 Case Study of a 30-Year-Old Woman**

### **Patient Profile:**

- Age: 30 years old
- Gender: Female
- Chief Complaint: Persistent neck pain for the past three weeks

### **Subjective Data**

#### **History of Present Illness (HPI):**

The patient reports gradual onset of neck pain that started three weeks ago. The pain is described as dull and aching, with intermittent sharp sensations, particularly when turning the head. The pain radiates slightly to the upper back and shoulders but does not extend to the arms. There is no reported history of trauma. The patient rates the pain as 6/10 on a numeric pain scale.

#### **Associated Symptoms:**

- Occasional headaches
- Mild stiffness, especially in the morning
- No numbness, tingling, or weakness in the arms
- No fever, chills, or night sweats
- No recent infections or illnesses

#### **Past Medical History (PMH):**

- No significant chronic illnesses
- No history of musculoskeletal disorders
- No previous surgeries

#### **Medications:**

- Occasional ibuprofen for pain relief
- No current prescription medications

#### **Family History:**

- No family history of rheumatoid arthritis or other autoimmune diseases
- No known hereditary musculoskeletal disorders

#### **Social History:**

- Works as a software engineer, frequently using a computer
- Engages in light exercise twice a week
- No smoking, occasional alcohol use
- No recent travel or exposure to infections

### **Objective Data**

#### **Physical Examination:**

- **General:** Well-appearing, no distress
- **Vital Signs:** BP: 120/80 mmHg, HR: 72 bpm, RR: 16/min, Temp: 98.6°F
- **Inspection:** No visible deformities, swelling, or erythema of the neck
- **Palpation:** Mild tenderness over the trapezius and cervical paraspinal muscles
- **Range of Motion (ROM):** Mildly restricted due to pain, particularly in lateral rotation and extension
- **Neurological Exam:** Normal strength in upper extremities, intact deep tendon reflexes, and normal sensation

#### **Differential Diagnoses**

1. **Mechanical Neck Pain (Cervical Strain/Sprain)**
2. **Cervical Disc Degeneration or Herniation**
3. **Myofascial Pain Syndrome**
4. **Cervical Spondylosis**
5. **Fibromyalgia**

#### **Diagnostic Workup**

- **X-ray of Cervical Spine:** To evaluate for structural abnormalities or spondylosis
- **MRI (if persistent or worsening symptoms):** To assess for disc herniation or nerve involvement
- **Blood Tests (if indicated):** ESR, CRP, Rheumatoid Factor (if inflammatory causes suspected)

#### **Management Plan**

##### **Non-Pharmacological Interventions:**

- Patient education on ergonomics and posture improvement
- Physical therapy referral for stretching and strengthening exercises
- Heat therapy for muscle relaxation

- Consider acupuncture or massage therapy if symptoms persist

#### **Pharmacological Interventions:**

- NSAIDs (e.g., ibuprofen 400 mg every 6–8 hours as needed)
- Muscle relaxants (e.g., cyclobenzaprine) if muscle spasms are present
- Topical analgesics (e.g., menthol-based creams)

#### **Follow-Up Plan:**

- Reassess in 2–4 weeks to evaluate symptom improvement
- Consider referral to a specialist if symptoms persist or worsen

#### **Conclusion**

This case study highlights the importance of a thorough history and physical examination in diagnosing and managing neck pain. Conservative management, including ergonomic modifications and physical therapy, is the first-line treatment for mechanical neck pain. Further investigations should be considered if red flag symptoms arise.

---

#### **References:**

- Deyo, R. A., & Weinstein, J. N. (2001). Low back pain. *New England Journal of Medicine*, 344(5), 363-370.
- Childs, J. D., et al. (2008). Diagnosis and treatment of neck pain: Clinical practice guidelines. *Journal of Orthopaedic & Sports Physical Therapy*, 38(9), A1-A34.

I've added more details on symptoms, posture assessment, diagnostic workup, and patient education. Let me know if you need any further refinements!

---

#### **Enhancements:**

##### **Symptoms (Expanded)**

- **Pain Quality & Radiation:** The patient describes a dull, aching pain with occasional sharp sensations, primarily in the posterior neck region, with mild radiation to the upper trapezius and shoulder area.
- **Postural Aggravation:** Increased pain after prolonged screen time or desk work, suggesting muscular strain from poor posture.
- **Additional Symptoms:** Reports occasional dizziness when looking up for extended periods, possibly due to cervical muscle tension.
- **Relief Measures:** Gentle stretching and movement improve symptoms, but prolonged static positioning worsens discomfort.